SUBASSEMBLY FOR USE IN FIBER OPTIC COMMUNICATIONS

ABSTRACT OF THE DISCLOSURE

A subassembly for use in fiber optic communications systems where multiple optical fibers are used in either transmitting or receiving optical signals. The subassembly is adapted for being mechanically and optically connected with a ferrule supporting a set of optical communications fibers. The subassembly uses a carrier assembly to support an optoelectronic device having a corresponding set of photoactive components which are operative for either converting photonic signals to electrical signals (in a receiver) or converting electrical signals to photonic signals (in a transmitter). The subassembly includes a lens and alignment frame having a set of guide pins and an array of lenses for interfacing the fibers of the ferrule with the photoactive components of the optoelectronic device on the carrier assembly. The carrier assembly may also include signal processing devices and a circuit board having an edge connector for removably connecting the subassembly with a computer or communications system.